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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,539	12/19/2003	Markus Reiter	20072	1538
23470	7590	12/12/2006	EXAMINER	
SRAM CORPORATION 1333 N. KINGSBURY, 4TH FLOOR CHICAGO, IL 60622			CHARLES, MARCUS	
			ART UNIT	PAPER NUMBER
			3682	

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/707,539

Applicant(s)

REITER, MARKUS

Examiner

Marcus Charles

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 6,9-11 and 16-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7,8 and 12-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/4/2004 and 5/27/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: _____.

DETAILED ACTION

This is the first action relating to serial application number 10/707,539 filed 12-19-2003. Claims 1-25 are currently pending.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "extending cutout" as in claim 13, must be shown or the feature(s) canceled from the claim(s). In addition, the reference numeral "1" in figs. 2 and 3, is not directed to any figure. In addition, figures 2 and 3 must be enclosed to depict one drawing figure. Note one or more parentheses can be used. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the

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brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the specification provides no antecedent basis for the "extending cutout" in claim 13.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 13-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 13, it is not clear as to what "extending cutout" is claim 13 referring too.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2, 4 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Brion (5,426,997). Brion discloses a sprocket assembly comprising three sprockets (18); a sprocket carrier (fig. 3) including a hub ring (14c), a plurality of carrier arms (16), the carrier arms have first and second opposite receiving surfaces (see figs. 2) such that the first and second sprockets are mounted on the receiving surfaces, a third sprocket arranged between the first and second sprockets.

In claim 2, it is apparent that each sprocket includes a plurality of mounting holes corresponding the plurality of mounting holes on the carrier arms such that the first and second sprockets are mounted to the carrier arm by fasteners (34).

In claim 4, not the fasteners (34) are screws.

In claim 12, it is apparent that the middle sprocket which is an intermediate sprocket would have a tooth count between the first and second sprocket in that it would have a tooth count greater than the lower than the first sprocket and higher than the second sprocket.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

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said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brion in view of Yang (5,782,713). Brion fails to disclose the sprocket includes a plurality of mounting tabs. Yang discloses a plurality of sprockets having a plurality of radially extending tabs (see attached illustration of fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the sprockets of Brion so as to include radially extending tabs as shown by Yang in order to increase the weights of the sprocket and to properly align the sprocket with the mounting holes of the hub.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brion in view of Yang. Brion discloses the third sprocket include a fourth plurality of mounting holes but fails to disclose the third sprocket is mounted to either the first or second sprocket. Yang discloses a bicycle sprocket assembly comprising a third sprocket (211) mounted to a second sprocket (212) through a plurality of mounting holes. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the sprocket assembly of Brion so that the third sprocket is mounted to one of the first and second sprockets in view of Yang in order to reduce manufacturing cost.

11. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brion in view of Yang as applied to claim 1 above, and further in view of Durham (5,809,8440. Neither Brion nor Yang discloses additional sprockets are mounted to the mounting tabs of the first and second sprockets via spacers disposed therebetween. Durham discloses a bicycle sprocket assembly

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comprising additional sprockets (5, 6) mounted to a sprocket via mounting spacers (18). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the sprocket assembly of Brion such that additional sprockets are mounted to the first and second sprockets as taught by Durham in order to reduce cost and to be able to replace the sprockets without dismantling the assembly.

12. Claims 13-15 as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Brion in view of Tani (5,480,359). Brion fails to show or disclose an axially extending cutout in the root region and the thickness of the arm is narrower in the root region, wherein the thickness the carrier arm is substantially equal to the to the sprocket spacing plus the thickness of the third sprocket. Tani discloses a sprocket assembly comprising a carrier (1) having an end region and a root region, an axially extending cutout (see attached) in the root region such that the thickness of the carrier arm is substantially equal to the to the sprocket spacing plus the thickness of the third sprocket. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the carrier of Brion to include the limitation of Tani in order to reduce stress on the upper section of the arm.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. WO (93/08071) to Chabiland, Nagano (5,217,413), Nagano (5,085,620) and Hanamura (Des. 432,054) disclose a bicycle sprocket assembly having a carrier with radially extending arms.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ridley Richard can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Marcus Charles
Primary Examiner
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December 04, 2006

FIG. 2

